

1905.



Bristol Port Sanitary District.

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# ANNUAL REPORT

OF THE

*Medical Officers of Health,*

AND OF THE

CHIEF PORT INSPECTOR OF NUISANCES,

**FOR THE YEAR 1905,**

Including Report on Canal Boat Inspection.

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*Printed by order of the Port Sanitary Committee.*

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1906.



# BRISTOL PORT SANITARY DISTRICT.

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## **Report of the Medical Officers of Health for the Year 1905.**

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*To* THE RIGHT HONORABLE THE LORD MAYOR AND COUNCIL  
OF THE CITY AND COUNTY OF BRISTOL, ACTING AS THE  
BRISTOL PORT SANITARY AUTHORITY.

MY LORD MAYOR AND GENTLEMEN.

We beg to Report as follows :—

### **Authority and Boundaries.**

The Bristol City Council is the Authority for the Port Sanitary District of Bristol, which was permanently constituted in 1894.

The district extends from Swallow Point in the Bristol Channel on the South, up to the line of the Severn Tunnel on the North; and comprises the deep water channel to the Port of Gloucester. The Mid Channel line separates it from the Welsh Port-Districts; and Avonmouth, Portishead, and the Bristol City Docks are included in the Bristol Port District.

TONNAGE FROM FOREIGN PORTS—arriving at  
Bristol Docks during 1905 (net registered tons):—  
City Docks, including Avonmouth and Portishead, 992,950.

GRAIN IMPORTS (Quarters):—  
City Docks, including Avonmouth and Portishead, 3,277,260

### **General Inspection of Vessels for Sanitary Purposes.**

There are two Port Inspectors, viz., the Chief Port Sanitary Inspector in Bristol, who also supervises Canal Boats, and the Port Sanitary Inspector, who, with a Boatman, is stationed at Avonmouth.

The Chief Inspector's Reports are appended.

### **Precautionary Measures against the Introduction of Disease.**

During the year, attention has been given to the inspection of vessels from countries where suspicion of Plague, Cholera, Yellow Fever, or other dangerous communicable disease existed.

### **Number of Ships from Infected or Suspected Ports.**

Name of Port or District.	No. of Vessels.	Name of Port or District.	No. of Vessels.
Alexandria... ..	17	Brought forward	171
Smyrra and District	19	Calcutta ... ..	7
New Orleans and Savannah ...	9	Batoum ... ..	2
Spanish Ports ...	43	Sea of Marmora ...	2
Italian Ports ...	3	River Plate Ports and District ...	43
German Ports ...	35	Black Sea Ports ...	80
Australian Ports ...	19	Portuguese Ports ...	6
Grecian Ports ...	3	North African Ports	7
Salonica ... ..	5	Cape Town and District... ..	9
Kurrachee ... ..	11	Bussorah ... ..	4
Bombay ... ..	7	Bahia Blanca ...	4
Carried over ...	171	TOTAL ..	335

## **Sickness on Board Ship during the Year 1905.**

Three hundred and thirty-five vessels from infected or suspected Ports were visited and dealt with during the year; no case of Cholera, Plague or Smallpox was met with, but considerable care was exercised in examining vessels with history of sickness on board, either on arrival or during the voyage.

## **Notification—Cholera Regulations.**

The Notification Act was adopted for the Port District on May 1st, 1897. The Schedule of Notifiable Diseases for the Port includes:—

Plague	Membranous Croup	Typhus	} Fever
Yellow Fever	Measles	Typhoid	
Small Pox	Erysipelas	Enteric	
Cholera	Scarlatina or	Relapsing	
Diphtheria	Scarlet Fever	Continued	
		Puerperal	

The Master or other person in charge of any ship, vessel, or boat is bound, under a penalty of Forty Shillings in default, as soon as he is aware of the existence of any one of these diseases on board, to give notice thereof to the Medical Officer of Health.

In addition to Notification, ships "from foreign" infected with Cholera, Yellow Fever, or Plague, are to anchor in Kingroad for Medical Inspection under the Local Government Board's Regulations of November, 1896.

## **Cholera, Plague, and Yellow Fever.**

On September 4th, the Local Government Board issued the following warning to Port Authorities:

"I am directed by the Local Government Board to note  
 "that cases of Cholera have recently occurred in  
 "certain places on the shore of the Baltic Sea.  
 "Cholera was present in several localities in Eastern  
 "Europe in 1904, and it has since spread through

“Russia, and has reached the Baltic by way of the  
 “River Vistula in the person of raftsmen descending  
 “that river. The cases which up to the present have  
 “occurred in East and West Prussia are, therefore,  
 “regarded as imported cases, and no definite out-  
 “break of the disease has been reported from any  
 “other quarter of Western Europe. Under the cir-  
 “cumstances mentioned, however, the Ports of the  
 “Baltic, and perhaps some of those of the North Sea,  
 “must be looked upon as threatened with the disease,  
 “and the Authorities of British Ports trading with  
 “Baltic and North Sea Ports should, therefore, be on  
 “their guard against the importation of Cholera into  
 “these districts by means of vessels coming from  
 “such ports. In the event of any part of the Baltic  
 “or North Sea being declared definitely infected  
 “with Cholera—it will be the duty of the Sanitary  
 “Authority to take with regard to vessels arriving  
 “from that Port the action prescribed by the Board’s  
 “Cholera Order, of November 9th, 1896.”

(Signed) S. B. PROVIS. Secretary.

This warning confirmed the previous warning of January,  
 1905, and instructions were at once issued to the Port  
 Inspectors to keep careful watch over all arrivals from the  
 Baltic or any suspected Ports.

During the Autumn, attention was paid to the possibility  
 of importation of both Cholera and Plague. Dr. Godby  
 Gibbs, of Clifton, and Dr. Shadwell, of Avonmouth, were  
 appointed additional Deputy Port Medical Officers of  
 Health to act in emergency under the Cholera Regula-  
 tions—Gloucester issued Regulations and Bristol issued  
 Regulations. Day and night service of the Launch was  
 maintained, and regular traders from the suspected  
 Coastline were watched—the Collector of Customs, the



Gloucester Port Sanitary Authority, and the Pilotage Committee were all communicated with and co-operated in the necessary precautions.

**The Regulations** at present in force (dated November, 1896) prescribe that the Officer of Customs shall detain "infected" or "suspected" ships for 12 hours, awaiting medical inspection. Thereupon certain duties as to medical inspection, medical examination, removal and nursing of patients, isolation of suspected cases, burial, disinfection, forward notification of persons leaving the ship in apparent health for other districts, dealing with infected bilges or ballast tanks, and water supplies, devolve upon the Port or Riparian Authority. The penalty for neglect, or obstruction to the execution of the order, is £100, with a continuing additional daily penalty of £50.

### **Proposed Alterations in Customs Procedure.**

At a Conference held on June 3rd, 1904, the question of a modification of the Customs boarding arrangements was discussed. Under the proposed new arrangement, the boarding of vessels for Customs purposes will no longer be carried out in Kingroad or at the River Mouth, but on arrival at the discharging berth.

This will mean an entire reconstruction of our scheme of Port defence, which has hitherto depended upon the Customs visit for the first knowledge of infected arrivals.

The Port inspecting staff will need to be strengthened, an assistant medical officer appointed for purposes of the 1896 Order at Avonmouth, and proper provision made for boarding on all tides by the steam launch, otherwise, the working of the Order will become impossible, especially in regard to Gloucester.

## **Port of Gloucester—Cholera and Plague Regulations—Conference of Authorities.**

As the deep water channel to the Port of Gloucester passes through Kingroad, and as anchorage is dangerous outside the entrance to the Port of Gloucester, the responsibility of dealing with Cholera, Plague, and Yellow Fever in Gloucester-bound ships was placed by Local Government Orders of 1890 and 1897 upon the Bristol Port Sanitary Authority.

The arrangement is very difficult to work, except when day and night inspection is needed for Bristol boats in Kingroad, so that the Launch happens to be on the spot.

A conference was held on January 13th, 1904, between representatives of the Bristol and Gloucester Port Sanitary Authorities, at which it was resolved :—

“That Gloucester would object to the revocation of the  
“ Local Government Board’s Orders, of 24th April,  
“ 1897, and the transfer to Gloucester of the duties  
“ thereby imposed upon Bristol ; but would be willing  
“ to consider any suggested modification of the  
“ existing arrangements, or of the scale of charges to be  
“ made for services rendered by Bristol with regard to  
“ Gloucester-bound vessels, and the suggestion that  
“ Gloucester should indemnify Bristol against any  
“ claims for damage or demurrage which may arise  
“ in consequence of services so rendered.”

“That Gloucester desired that Bristol should undertake  
“ and superintend the inspection of Gloucester-bound  
“ vessels at Portishead or in Kingroad when necessary,  
“ and also deal with any such vessels, if infected, and  
“ arrange for the removal and treatment of any  
“ infected persons found thereon ; but that the ques-  
“ tion as to the vessels to be inspected should be



‘ arranged by the two Authorities from time to time, “having regard to the prevalence of disease and “other circumstances.”

It was arranged that Bristol should submit proposals for dealing with the matter, and a revised scale of charges which should take into account the Bristol establishment charges, and the remuneration and any necessary increase of the staff. An agreement was finally entered into on 28th November, 1905.

### **The Ambulance Steam Launch, “Luath.”**

This vessel, which was purchased in 1893, has proved very useful during the year; and, in addition to Port service, has been requisitioned for River Ambulance service, and has conveyed patients to and from Bristol and the Hospital Ship.

On 7th November, I received a letter from the Secretary of the Bristol Docks, asking on what terms the Health Committee would be prepared to grant the Haven Master the use of the “Luath,” at such times as he requires.

The matter was referred to the Port Sub-Committee for consideration.

### **The Hospital Ship “Magarida.”**

The Hospital Ship has proved valuable in relief of the City Hospitals. Nine City cases from Novers Hill Hospital have been nursed during the year on board. All the cases were Small Pox.

The Moorings of the Hospital Ship were examined in June, 1905, and reported to be in order.

**HOSPITAL SHIP—"MARGARIDA."**

CASES ADMITTED DURING THE YEAR 1905.

Number	Name.	District from which Admitted.	Nature of Disease.	Date of Admission.	Date of Discharge.
882	J. F.	Novers Hill Hospital, City	S. Pox	6 June	6 July
825	F. C.	" "	"	15 "	20 "
923	G. H.	" "	"	28 "	31 "
954	J. S.	" "	"	28 "	31 "
1034	J. L.	" "	"	14 July	22 "
1035	J. A.	" "	"	14 "	22 "
1039	T. C.	" "	"	14 "	14 Aug.
1065	G. P.	" "	"	14 "	12 "
1143	R. C.	" "	"	21 "	12 "

### Distribution of Plague in 1905.

Plague was still pandemic through the year, but Europe remained free with the exception of an occasional ship-borne introduction. During the last week of 1904, Plague accounted for 22,645 deaths in India. The mortality figures for this and the three previous years in India were,—

1901	...	...	...	273,679
1902	...	...	..	577,427
1903	...	...	...	851,263
1904	...	...	...	1,022,299

but, amongst 140,000 native troops there were only 115 deaths from Plague.

The mortality continued excessive during the early months of 1905, rising from 28,104 in the week ending January 21st, to 57,702 in the week ending April 1st, and stood at 52,253 for the week ending May 6th. In June, however, a favourable decline was manifested, the figures for the weeks ending June 3rd and 10th being, respectively, 15,317 and 7,486; for the week ending July 1st, 2,201; for the week ending August 5th, 1,054; after this, the highest mortality recorded from Plague in India was 4,080 during the week ending September 30th; during October, the weekly deaths did not exceed 3,624, and in November, 3,090.

Other countries in which Plague was reported during the year were Cape Colony, Mauritius, British S. Africa, Russia (the Khirgis villages), Hongkong, Burmah, Siam, Aden, Egypt, Australia (Queensland), Chile (Tarapaca), Brazil, Persia, and Russian Asia (Transbaikalia).

In February, the Liverpool Port Sanitary Authority prosecuted the master of the s.s. "Crew Hall," which arrived on January 30th from Rangoon, for neglecting to truly answer questions in regard to a case of Plague on board. The master was duly fined.

On May 5th, a labourer was admitted to the Leith Fever Hospital with a suspicious illness, query Enteric Fever or Plague. On May 6th his daughter, and on May 10th the mother and a child of 6 also sickened with what proved to be Plague. The man worked on a tramway, the wife at a rag store situated on the bank of the harbour—the source of infection was obscure, but probability pointed to ship-brought rat infection. No spread of the disease occurred.

In June, the Local Government Board issued a statement that a case of Plague had occurred at Manchester, the patient was an assistant cook on a vessel which arrived in Middlesborough on June 8th from Buenos Ayres *via* Hamburg, where she arrived on May 30th, and reported all well. In consequence, however, of dead rats being discovered on board, measures were taken to destroy the rats and disinfect the ship. The patient's illness did not develop until June 9th, after he had left Middlesborough, and it proved fatal on June 12th.

### **General Survey of the Year's Work.**

Early in the year it was decided to repeal the Regulations made by the Bristol Port Sanitary Authority under Section 125, Public Health Act, and dated 12th October, 1888, as out of date. If fresh Regulations are needed, they will be adapted to present conditions.

In March, the prevalence of Spotted Fever (Cerebro-Spinal Meningitis), in New York, led to special watching of vessels from America. No case was, however, introduced.

On March 18th, the mess-room boy on s.s. "Gledhow," 40 days out from Rosario, was suffering from some symptoms suggestive of Plague, and was removed to Ham Green Hospital for observation. Bacteriological confirmation was absent and no development occurred, the patient was dis-

charged cured. Attention was paid to disinfection of the ship, and to the condition of the rats on board, nothing suspicious was observed.

On March 25th, the s.s. "Heros" arrived from Villa Constitucion, River Plate, with a man sick on board. The second Engineer had died on the voyage, apparently of Phthisis. The sick man appeared to be suffering from a mild attack of Enteric Fever, and was removed to the Royal Infirmary.

On April 7th, the s.s. "Holgate" arrived from Rosario with a case of "Gastric Fever" on board, convalescent. There was suspicion of mild Enteric Fever, but the "Widal" examination gave a negative result; the man was allowed to proceed to Cardiff, and a forward notice sent to the Medical Officer of Health.

On April 8th, the s.s. "Swaledale" arrived from Calcutta, having on board a lascar with swollen inguinal glands. Medical examination showed that the case was not suspicious of Plague. There were plenty of live rats aboard, and no signs of sickness amongst them; no dead rats were found.

In May, fourteen arrivals were expected in the Port of Bristol, from Ports known to be infected or suspected of infection of Plague. Arrangements were therefore made for daily inspection.

On May 16th, the Gloucester Port Sanitary Authority requested that ships arriving in Kingroad from River Plate, Bombay, Calcutta, and Kurrachee, and bound to the Port of Gloucester should be *visited* and *examined*. Arrangements were accordingly made for this to be done.

On May 24th, a Conference took place between Representatives of the Bristol and Gloucester Port Sanitary Authorities in regard to the joint arrangements for carrying



out the Local Government Board's Cholera, Plague, and Yellow Fever Regulations in Kingroad. A revised scale of charges was agreed to.

In July, notice was received from the Customs that some cases of Diarrhœa had occurred—before the vessel arrived at Algiers—on the s.s. “Shelley,” from Salonica, 17 days out: on arrival all were well, the illness was probably due to the effluvia from a consignment of raw bones, for the men recovered as soon as the bones were jettisoned.

On July 5th, a sudden death occurred on board the s.s. “Elswick,” from Novorossisk (Black Sea), as she was entering Cumberland Basin. The death was certified as due to heart disease.

In July, special instructions were issued that vessels bound for Gloucester from foreign were to be “spoken” in Kingroad, but not “boarded” or “inspected” unless coming within the previous instructions.

On the 22nd July the Port Boundaries were visited.

On 28th July information was forwarded to Gloucester of sickness on the barque “Wolfe,” passed through Kingroad.

On 4th August, the s.s. “Craigard,” from Kurrachee, was medically inspected in Avonmouth and cleared.

On August 4th, the s.s. “Port Antonio” arrived from Jamaica with a case of Phthisis on board; the patient was landed in charge of his friends.

On 11th August a man arrived on the s.s. “Montfort,” from Montreal, *via* Liverpool, and was admitted to the General Hospital, he had apparently been suffering from Enteric Fever since July 30th. The case proved fatal.

On October 18th, the s.s. “Cara,” from Rosario, reported that a passenger had died on the passage to Demerara. No sickness was present on arrival.



On November 25th, the s.s. "Weybridge," from Rosario, arrived in Port, reporting the second Engineer laid up 14 days, with indefinite symptoms. The men were paid off on arrival, and forward notice sent to the Medical Officer of the man's home district.

On November 4th, information was received from Swansea that a man trading in a Bristol coasting steamer had arrived by train and died of Enteric Fever in the hospital. The boat's journeys were traced, disinfection and fresh water supplies secured; the owners had no knowledge of the man's illness.

On December 8th, the ship "Rhone" arrived from Demerara, one month out—cargo linseed. She sailed from Calcutta on July 31st, with 600 coolies for the plantations. Six cases of (?) Cerebro Spinal Fever occurred on board, a death from Dysentery also occurred; a doctor was carried. No illness was found on arrival in Bristol, nor on voyage from Demerara.

On December 11th, the s.s. "Grayfield" arrived from Taganrog, with a cargo of grain. The Cook had been ill four days. He was removed to the Bristol General Hospital with Enteric Fever, and recovered.

The General Inspection of vessels for sanitary purposes is dealt with in the Chief Port Inspector's Report, which follows this.

We are, Gentlemen,

Your obedient servants,

D. S. DAVIES, M.D.,

*Port Medical Officer of Health.*

J. C. HEAVEN, M.R.C.S., L.R.C.P.,

*Assistant Port Medical Officer of Health.*

# BRISTOL PORT SANITARY DISTRICT.

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## **Report of the Chief Port Sanitary Inspector for the year 1905.**

PORT SANITARY OFFICES,  
40 PRINCE STREET, BRISTOL,  
*January, 1906.*

To THE CHAIRMAN AND MEMBERS OF THE  
BRISTOL PORT SANITARY AUTHORITY.

GENTLEMEN,

I beg to submit for your approval the 21st Annual Report of the Port Sanitary duties discharged under the provisions of the Public Health Acts, the Notification Act, and the Orders issued by the Local Government Board.

Detailed information is given of the systematic inspection of all classes of ships, with the conditions found, the measures adopted to effect the removal of nuisances and repair of defects, and the results obtained with a view to maintain or improve the health conditions of living spaces in the various kinds of vessels that visit the Port, also special measures for preventing the introduction of Plague, Cholera and Infectious diseases generally.

Special measures in consequence of a considerable number of Grain ships arriving from various Ports at which Plague has occurred have been necessary to ensure that no such disease either by persons or by rodents should be unknowingly imported. These measures comprised the visiting of vessels before they entered the various Docks or proceeded to Sharpness; and secondly, the daily examination of grain ships discharging to ascertain whether any suspicious conditions existed or unusual mortality had occurred amongst the rodent population of such ships.

An experiment as ordered by your Committee to be tried for catching and destroying rats was carried out from June 26th to September 20th, during this period 876 were caught in 34 ships averaging 25·7 per ship and the numbers caught varied from 1 to 138 in the various vessels, while from the City Sheds and Wharves 189 were destroyed, making a total of 1,065.

Since the question of Rat-borne Plague has received the attention of Port Sanitary Authorities, the steps taken by them and the Owners and Masters of ships, have certainly resulted in a considerable diminution of the rodent population on many grain carrying ships as compared with a few years since, though in regard to others no effort has been made, consequently they abound in considerable numbers in these vessels.

The reducing process has been assisted somewhat by Authorities abroad at several places where Plague has occurred, by their insistence on the mooring ropes, etc., being guarded to prevent ship-rats getting ashore, and fortunately this rule works both ways, and prevents shore rats getting on board. Ships can thus easily be kept comparatively free with little trouble and cost.

### **General Inspection.**

As required under the Provisions of the Public Health Act, Sec. 91, and following Sections applying thereto in respect of General Sanitary Conditions, also Sec. 110 as to Infectious diseases, has been continued at Bristol, the Channel Docks, also in Kingroad and the Channel by means of the Steam Launch and row Boat as found necessary, the result being that 1,447 ships for Bristol Ports and 111 for the Gloucester Port Sanitary Authority were dealt with according to the requirements of each case.

These ships consisted of 703 from Foreign, and 855 from Coastwise Ports.

Out of these, 238 were found to have Sanitary defects or nuisances of some kind requiring action by your Officers for obtaining abatement or remedy. This number is 20 less than in 1904.

The general Sanitary conditions found on 592 Foreign going ships inspected in detail in the various Docks were about the same as in the previous year, as 173 or 29·2 per cent. of the total were defective, compared with 643 examined in 1904 when 185 nuisances existed, equal to 28·7 per cent.

In the condition of Coastwise vessels there also was no improvement, as out of the total of 855 ships examined 65 or 7·6 per cent. had some defect, against the result of 7·1 per cent. obtained in the year before.

Taking the whole number of British and Foreign ships collectively the result was not more favourable, as it works at 16·4 per cent. defective, whereas last year it was 15·5 per cent.

It is plain that the living space conditions on British ships at this Port have not improved in ratio to that obtaining in Foreign owned ships, as a reference to Table E appended will show that in Foreign ships an improvement of 5·7 per cent. was noted during the year, whereas in British ships there was a retrograde step of 1·4 per cent.

The cause of improvement in Foreign owned ships is attributable to the fact that fewer of the old fashioned ships, (originally belonging to British owners,) are now being sailed (to this district at least,) in the same state as originally constructed, they have mostly either gone out of

use, or the living spaces have been altered or reconstructed with a view to securing better health and comfort conditions for the crews, or else the old craft are replaced with modern ships, (which frequently have been built abroad,) in which much better accommodation has been provided, in respect of arrangement, space, light and protection from bad weather, than now exist in the bulk of tramp ships and many liners. The poor accommodation of Seamen and Firemen in many British ships has been referred to many times in these Reports, this question has also been commented upon by the Central Authority recently, it is therefore to be hoped that something will be done to secure more healthy and convenient quarters on new ships, and a corresponding alteration in old ships when an opportunity occurs.

The habitable conditions of such places could be much improved if some Government Department were given powers to issue well considered schedules for the construction of crew spaces according to class of vessel, with power to require the submission of plans and supervision of new constructions, and alterations, whereby after the questions of seaworthiness, power, cargo spaces and working conditions have been dealt with, the highest standard of safety, comfort, position, sanitary arrangements may be secured, with a minimum exposure in stress of weather, as against the practice now generally in force by which such matters are left chiefly to chance or individual caprice, then more space, light, air could be provided, and so many men would not be in danger in getting to or from their work, to the berths forward, beside doing away with the necessity of men remaining in the stokeholes, which I am frequently told they are obliged to do for long periods during bad weather or run the risk of being swept overboard, or injured, or at least drenched from the waves washing over the ship.



The number of ships inspected in detail in the various Docks with Nationality and results found respectively are given in the following list:—

	No. of Ships.		No. having Defects.	
British	...	...	1,283	216
Norwegian	...	...	48	9
German	...	...	18	3
Italian	...	...	5	1
Swedish	...	...	23	2
Danish	...	...	7	—
French	...	...	20	4
Greek	...	...	5	—
Dutch	...	...	10	—
Spanish	..	...	6	2
Russian	...	...	18	1
Austrian	...	...	2	—
Belgian	...	...	2	—
Total	...	...	1,447	238

Or 16·4 per cent.

In these 238 ships, 288 various nuisances or defects were dealt with, being a decrease of 13 compared with last year.

The improved condition noted in Foreign ships was accounted for by the provision of the usual ventilation fittings, (which certainly are little enough in any case,) in ships of those Countries where it was the usual custom to ignore such matters, and from an increased measure of cleanness and supervision being found in others, a result no doubt largely attributable to inspection in British Ports. The total number of such defects in these ships amounted to 22 only, whereas 35 was the number in 1904.

The principal ground of complaint was as in previous years dirty and unpainted forecastles, a total of 224 being noted, of which 164 were in sea going ships and 60 in coasting ships, or equal to 27·7 per cent. in the former and



7 per cent. in the latter cases respectively, so judging from these facts, conclusions might be drawn that lack of interest and supervision are shown in these matters, and this may be so in a few cases, but it chiefly arises from the system of short engagements in force. In British sea going ships, as the men are engaged for the trip only, which chiefly is of short duration, and they are paid off as soon as possible after the ship arrives home, consequently the sailors and firemen have no lasting interest in the vessel, and the officers are often unable to get more than the most superficial cleaning work done, and sometimes not even this.

Another cause is the cosmopolitan composition of the crews and fireman squad, as representatives of 4 or 5 nations are often included in the complement of one ship, consequently proper control is difficult, and often unobtainable in respect of these matters, so they are left to be found by the Port Sanitary Inspectors in Port.

There is some excuse to be made for the men objecting to be turned out for their berths to be cleaned and painted, (except in hot weather when a tent can be rigged on deck for them), as seldom is there any other accommodation, and they naturally object to sleep in freshly painted rooms.

Defective lighting, or the small amount that by past custom has been deemed sufficient, but which is very insufficient, was found in three cases, being two in excess of 1904, and non provision of ventilators occurred in but four crew spaces, which compares favourably with the previous year when 13 were notified, only one of these referred to a British ship.

It was necessary to make requirements respecting nuisance deposits, paint lockers in forecastles, and defective closets in three cases only, whereas in 1904 notices were given on 14 ships.

Leakages into crew spaces numbered 30 or five less than the previous result obtained.

The cleansing of drinking water tanks was necessary in three cases only in Dock, but such tanks on nine ships from suspected Cholera Ports were dealt with in Kingroad.

Various dilapidations of crew spaces occurred in 14 ships, being an increase of four.

The total number of nuisances and defects amounting to 288, in 238 British or Foreign vessels were dealt with by verbal or written notice as follows:—

Verbal Notices complied with	...	194
Do. not do.	...	11
Written Notices complied with	...	28
Do. not do.	...	5
		<hr/>
		238
		<hr/>

222 of the total number=93·2 per cent. of the defects were remedied, leaving 16=6·7 per cent. (of which Foreign ships were accountable for six,) not complied with when leaving the port, but which most probably have since been attended to. Judging from the experience of former years, this result is the best yet obtainable except in 1903, when it was 93·6 per cent

Summing up the results of the year's work, there has been a slight improvement as a whole, the nature of the nuisances and defects found was not so bad as that found formerly and was chiefly the effect of recent causes in most cases.

It is pleasing to say that it has not been necessary to report any of these cases for legal proceedings, as the Owners, Masters and Agents, have promptly carried out the work as requested with the few exceptions above noted, of which further information is expected.

The Port Sanitary Officers at Cardiff, Barry, Newport, and other Ports have again given great assistance in following up vessels to get notices complied with, and to them thanks are due for their kind co-operation.

I beg to append tables of work done and showing results obtained, as follows:—

- (A)—Ship Inspections, Description, Nuisances and Defects, and Totals.
- (B)—Comparison of result of Port Sanitary Work since 1884.
- (C)—Particulars of Infectious Diseases and other illness on ships.
- (D)—General Table of Sickness.
- (E)—Classification of Ships, with conditions found and percentages.

### **Steam Launch, “Luath.”**

This boat has again proved very useful, as she has been on duty on 409 tides during the year, as follows:—

- 1.—Attending to ship arrivals from suspected Ports.
- 2.—Acting as tender to the Ship Hospital, conveying coal, water, stores, etc., of which many tons were required, as the Ship has been mostly used for the treatment of Urban Small Pox Patients.
- 3.—Conveying said Patients and infected materials for disinfection, etc.
- 4.—Port Administration Work.

Patrol work in the Channel was necessitated last year in consequence of Plague in various Ports from which Bristol is frequently receiving cargoes, and Cholera breaking out on the Continent last Autumn, the boat has been regularly in use on this work in Kingroad through most of the year, and though there has been considerable wear and tear no special

repairs have been required since the spring overhaul, beyond the usual replacing of worn out parts, and taps that have been in use for many years, and the usual adjustment of bearings and wearing parts, joints, etc.

The general up keep of the boat has been done so far as could be reasonably expected by the crew considering that they have worked day and night tides for considerable periods without relief, and the general duties were discharged satisfactorily.

The usual survey for boiler and hull becomes due in March next, and will necessitate the usual docking for cleaning and painting, and shaft examination purposes.

### **The Ship Hospital.**

As instructed by your Committee a section of the unemployed under the supervision of the City Engineer's Department, completed the painting of all the interior parts and exteriors of houses, fittings, etc., during the early part of the year.

Certain works in connection with the nurses' room, construction of ward w.c., etc., have been done by the resident Ship Carpenter assisted by a Plumber from the Engineer's Department.

No exterior structural repairs of any importance have been required, beyond what the carpenter has been able to do unassisted.

The moorings were surveyed by a Representative of the City Engineer's Department during the summer, and reported as satisfactory.

The exterior of the ship was painted by the ship staff.

During the year nine smallpox cases were accommodated in this Hospital.

The respective duties were well discharged by members of the staff.

The Temporary Port Office at Avonmouth Pier has been of great service in providing storage for the necessary implements, disinfectants, etc., also shelter during night and day look-out duties, and convenience for official work.

The Inspector and Assistant Inspector at Avonmouth have carried out their respective duties most efficiently wherever required.

I beg to append tables A., B., C., D., E., which give particulars of the ships inspected and the work done, also Diseases on Ships, and classification of the results obtained.

I am, Gentlemen,

Yours obediently,

S. DIMOND,

*Chief Port Inspector.*







# Port Sanitary.

TABLE

## SHIP INSPECTION AT BRISTOL, AVONMOUTH, PORTS

Showing particulars of Inspection, &c.

FROM FOREIGN PORTS

1905	Description of Ships.			British.	Foreign.	Ships having Foul or Dirty Crew Spaces	With Defective Lighting.	With Defective Ventilation.	Foul Bilges or Deposits.	Water Closets or Paint Lockers connected with Living Spaces.
	Port of Sailing.	Steamship.	Sailing.							
Jan. to Mar. } April to June } July to Sept. } Oct. to Dec. }	From Foreign Ports.	106	21	92	35	44	1	1	...	...
	do.	120	22	108	34	35	...	1	...	...
	do.	130	40	123	47	42	..	...	1	...
	do.	127	26	105	48	43	1	1	...	...
	Total	483	109	428	164	164	2	3	1	...

1905

COASTWISE

Jan. to Mar. } April to June } July to Sept. } Oct. to Dec. }	From Coastwise	111	203	314	...	28	1	1	...	...
	do.	74	164	238	...	14	...	...	...	...
	do.	39	88	127	...	6	...	..	...	...
	do.	65	111	176	...	12	...	...	...	...
Total Brought down	From Coastwise	289	566	855	..	60	1	1	...	...
	,, Foreign	483	109	428	164	164	2	3	1	..
	Grand Totals	772	675	1283	164	224	3	4	1	...

Summary

Number of Ships Visited in Kingroad or River to prevent  
 Number of Ships Inspected in detail at Bristol, Avonmouth  
 Number of Ships on which disinfection was carried out  
 Number of Ships revisited to enforce compliance with regulations  
 Number of special visits made to ships from suspected areas  
 respecting sick or dead rats on 258 ships ...

Population on Ships dealt with

The Number of Ships from Infected Ports requiring special

E A.

Bristol.

PORTISHEAD AND KINGROAD, DURING THE YEAR 1905.

Action taken, and Results.

GN PORTS.

Requiring lining of Iron Plates over Sleeping Bunks.	Leakages into Living Spaces.	Bad Water Supply or Unclean Tanks.	Overcrowding.	Dilapidations and Defective Drainage.	Total sanitary defects.	Verbal Notices complied with.	Verbal Notices in abeyance.	Written Notices complied with.	Written Notices in abeyance.	Ships visited or spoken in Kingroad or River.	Re-visits to enforce Notices.	No of Persons inhabiting Ships inspected.
...	5	1	...	1	60		1	9	1	104	190	3962
...	5	1	...	4	46		3	5	...	213	73	5047
...	7	1	...	3	56	43	2	6	1	267	52	5061
...	8	...	...	...	53	32	3	2	2	165	40	4544
..	25	3	...	8	215	138	9	22	4	749	355	18614

ISE.

...	...	...	...	1	31	25	...	...	...	...	37	1985
...	3	...	...	1	18	10	...	5	1	...	17	1198
...	2	...	...	2	10	8	1	1	...	...	13	631
...	...	...	...	2	14	13	1	...	...	...	19	1027
...	5	...	...	6	73	56	2	6	1	...	86	4841
...	25	3	...	8	215	138	9	22	4	749	355	18614
...	30	3	...	14	288	194	11	28	5	749	441	23455

Importation of infectious disease	...	...	749
at Portishead Docks	...	...	1447
at other ports	...	...	24
at other ports	...	...	441
Infected ports to make examinations and enquiries	...	...	2169
...	...	...	4830

... 23,455  
treatment for preventing the landing of Rats was 258.



**Port Sanitary.** **TABLE B** **Bristol.**  
**SHOWING PROGRESSIVE WORK OF SHIP INSPECTION SINCE INSTITUTED.**

Year.	Number of Ships Inspected.	CONDITION.			NOTICES.		Percentage of work known to be done.
		Good.	Unsatisfactory.	Percentage having one or more Defects.	Served.	Complied with.	
1885 (4 months)	191	109	82	43 per cent.	82	34	41 per cent.
1886	722	577	145	20 per cent.	186	85	45 per cent.
1887	1461	1073	388	26 per cent.	388	270	69 per cent.
1888	1371	1072	299	22 per cent.	313	206	66 per cent.
1889	1339	995	344	25 per cent.	391	303	77 per cent.
1890	1224	874	350	28 per cent.	386	314	81 per cent.
1891	1322	950	372	28 per cent.	439	366	83 per cent.
1892	1265	1004	261	21 per cent.	317	289	91 per cent.
1893	1211	998	213	17·5 per cent.	222	204	92 per cent.
1894	1594	1204	390	24 per cent.	390	359	92 per cent.
1895	1390	1106	284	20·4 per cent.	284	263	92·6 per cent.
1896	1675	1383	292	17·4 per cent.	292	266	91 per cent.
1897	1645	1363	282	17·1 per cent.	282	257	91·1 per cent.
1898	1610	1320	290	18·0 per cent.	290	266	91·7 per cent.
1899	1544	1322	222	14·4 per cent.	222	203	91·4 per cent.
1900	1552	1316	236	15·2 per cent.	236	198	86·0 per cent.
1901	1639	1414	225	13·7 per cent.	225	195	86·6 per cent.
1902	1708	1583	225	13·17 per cent.	225	195	86·6 per cent.
1903	1662	1412	250	15·0 per cent.	250	234	93·6 per cent.
1904	1663	1405	528	15·5 per cent.	258	224	86·8 per cent.
1905	1447	1209	238	16·4 per cent.	238	222	93·2 per cent.







# Port Sanitary.

## TABLE C.

### Bristol.

Infectious Diseases occurring on Ships during voyage or on arrival.

1905	Name of Ship.	Loading Port.	Disease.	No. of Cases.	Died.	Re-covered	GENERAL PARTICULARS.
Mar. 26th	" Heros " S.S.	Rosario	Enteric	1	0	1	The patient was treated at the Royal Infirmary, and all preventive steps were taken. Third Engineer died on passage, cause uncertain.
April 7th	" Holgate " S.S.	Do.	? Do.	1	0	1	This patient was convalescent on arrival; all precautions taken.
Aug. 11th	" Montfort " S.S.	Montreal	Do.	1	1	0	This case was removed to Bristol General Hospital, and all disinfection measures carried out.
Nov. 4th	" Atlanta " Trow	Gloucester Trader	Do.	1	1	0	A sailor left this craft and proceeded by train to Swansea, where he died in Hospital on December 4th.
Dec. 8th	" Rhone " Ship	Calcutta via Demerara	Cerebro Spinal Fever	6	6	0	These cases occurred on the passage to Demerara amongst the coolies on board. There was no sickness on the passage from Demerara.
" 11th	" Grayfield " S.S.	Taganrog	Enteric	1	0	1	The case was removed to General Hospital, and all preventive measures adopted.

			Totals	11	8	3	
Other Diseases.							
Mar. 20th	"Gledhow" S.S.	Rosario	Suspected Plague	1	0	1	The patient, who was suffering from swollen glands, was taken to Isolation Hospital for treatment and observation.
April 8th	"Swaledale" S.S.	Calcutta	Do.	1	0	1	A Coolie having developed suspicious symptoms, was kept under observation.
July 4th	"Shelley" S.S.	Salonica	Diarrhoea	5	0	5	This sickness was probably caused by a nuisance arising from a consignment of raw bones, as the men recovered soon after the bones were jettisoned.
Aug. 4th	"Craigard" S.S.	Kurrachi	Suspected Plague	1	0	1	A man was removed to Hospital for observation and treatment of swollen glands.
Do.	"Port Antonio" S.S.	Jamaica	Phthisis	1	0	1	A sick passenger was landed from this Mail Boat in charge of friends.
Oct. 18th	"Cara" S.S.	Rosario	Diarrhoea	1	-	-	A seaman was landed at Queenstown for treatment at Hospital.
Dec. 8th	"Rhone" Ship	Calcutta	Dysentery	1	1	0	A passenger Coolie died on the passage to Demerara.
Totals				11	1	9	

**Port Sanitary.**

**TABLE D.**

**Bristol.**

Return of Cases of Sickness reported to have occurred during the voyage,  
or found on arrival in Port.

1905.	Small Pox.	Cholera.	Diphtheria.	Enteric Fever.	Malaria Fever and Ague.	Yellow Fever.	Diarrhoea.	Dysentery.	Influenza and Colds.	Veneral Diseases.	Rheumatism.	Phthisis, Tubercu- losis and Chest Diseases.	Fung Diseases.	Jaundice.	Heart Diseases.	Inflammation of Bowel.	Beri-Beri.	Remittent Fever.	Accidents.	Suspected Plague.	Cerbera Spinal.
January	...	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
February	...	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-
March	...	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
April	...	-	-	1	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	1	-
May	...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June	...	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-
July	...	-	-	-	-	-	5	-	-	1	-	-	-	-	1	-	-	-	-	-	-
August	...	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
September	...	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
October	...	-	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
November	...	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	-
December	...	-	-	2	-	-	-	1	4	1	1	-	-	1	-	-	-	-	-	-	6
TOTALS	...	-	-	5	1	-	6	1	6	6	3	2	-	2	2	1	-	1	1	3	6



## **ANNUAL REPORT ON CANAL BOAT INSPECTION FOR THE YEAR 1905.**

TO THE CHAIRMAN AND MEMBERS  
OF THE HEALTH COMMITTEE.

I beg to submit a Report in accordance with the requirements of Section 3 of the Canal Boats Act, as to the work done in carrying out the Regulations during the past year, with a summary of the contraventions and defects found in the Canal Boats examined.

The duties have been discharged by the Chief Port Sanitary Inspector, in conjunction with Ship Inspection work, and he is remunerated in connection therewith.

The number of Canal Boats examined was 50, with the result that in 19 of them contraventions of the Regulations or other defects were found.

Canal Boat Traffic has not increased in this district during the past year, the boats plying are chiefly employed as regular carriers between Bristol, Bath, Bradford-on-Avon, and Devizes, and they are becoming less used as regular living spaces in consequence of intermittent employment, so that women and children are rarely found on them, and the men are frequently changing, often being employed for the trip only.

They are generally manned by three men to two narrows; or, two or three men to one wide boat, of which there are but two or three plying.



## PARTICULARS OF INSPECTION,

### (A)—*Registration.*

All Boats examined had been registered, with one exception.

### (B)—*Notification of Change of Masters.*

This Authority is not a Registration Authority, consequently no notifications were received.

### (C)—*Absence of Certificates.*

This occurred in 15 cases, and arose chiefly through change of ownership or change of Masters who reported that the Certificates had been sent for alteration, or through lying up, the papers had been mislaid.

### (D)—*Defective Marking.*

In two cases owners were called upon to renew indistinct lettering and numbering.

### (E)—*Overcrowding.*

None was discovered or reported,

### (F)—*Separation of Sexes.*

No infringement was found.

### (G)—*Cleanliness.*

The general conditions noted were not so good as a whole, in consequence of change of men, and intermittent employment.

### (H)—*Ventilation.*

The regulation openings were available in all cases.

### (I)—*Painting of Cabin Interiors.*

In five cases this was required, and the necessary notices were given.

### (J)—*Provision of Fresh Water Vessels.*

No contravention of the Regulations was found.

(K)—*Removal of Bilge Water.*

One case of excessive leakage, which is now being repaired.

(L)—*Notification of Infectious Disease.*

No cases were found or reported.

(M)—*Refusal to Admit.*

None.

(N)—*Dilapidations and Cabins, etc.*

Three cases of this nature came under notice, and the usual steps were taken to get repairs effected.

The total number of contraventions and defects amounted to 26, and consisted chiefly in the absence of Certificates and want of interior painting.

The usual requests and notices given were complied with, except three, which are now under observation.

I am, Gentlemen,

Your obedient Servant,

S. O. DIMOND,

*Inspector of Canal Boats.*

D. S. DAVIES, M.D.,

*Port Medical Officer of Health.*

## PORT REPORT, 1905.

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